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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/717,413 | 11/21/2000 | Owen H. Decker | FA0972 US NA | 6493 |

23906 7590 09/20/2002

E I DU PONT DE NEMOURS AND COMPANY
LEGAL PATENT RECORDS CENTER
BARLEY MILL PLAZA 25/1128
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WILMINGTON, DE 19805

EXAMINER

SHOSHO, CALLIE E

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

1714

DATE MAILED: 09/20/2002

7

Please find below and/or attached an Office communication concerning this application or proceeding.

1-0

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/717,413 | DECKER ET AL. | |
| | Examiner | Art Unit | |
| | Callie E. Shosho | 1714 | |

-- Th MAILING DATE of this communication app ars on the cov r sh t with th correspondenc addr ss --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 May 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 5-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2 and 5-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1. ☐ Certified copies of the priority documents have been received.
 - 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. All outstanding rejections except for those described below are overcome by applicants' amendment filed 5/31/02.

Claim Rejections - 35 USC § 102

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Tolliver et al. (U.S. 6,217,252) taken in view of the evidence given in *Encyclopedia of Polymer Science and Engineering*.

The rejection is adequately set forth in paragraph 5 of the office action mailed 1/17/02, Paper No. 2, and is incorporated here by reference.

4. Claims 5-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Muthiah et al. (U.S. 6,017,640) taken in view of the evidence given in *Encyclopedia of Polymer Science and Engineering*.

The rejection is adequately set forth in paragraph 6 of the office action mailed 1/17/02, Paper No. 2, and is incorporated here by reference.

Response to Arguments

5. Applicants' arguments filed 5/31/02 have been fully considered but they are not persuasive.

Specifically, applicants' argue that:

(a) Tolliver et al. is not directed to powder coating that provides matte finish and there is no teaching of how to reduce gloss of powder surface without negatively influencing flow of the powder on baking to form a smooth surface acceptable for automotive use.

(b) Muthiah et al. do not suggest particular spherical particles in amount, type, and size presently claimed.

With respect to argument (a), it is noted that Tolliver et al. disclose powder coating composition comprising thermoplastic or thermosetting polymer and 5-35% filler wherein the filler is preferably spheroidal and includes ceramic microspheres and method of adding the spheroidal particle to the powder coating composition.

While there is no explicit disclosure of the median particle diameter or the maximum particle diameter of the ceramic microspheres, it is well known as found in *Encyclopedia of Polymer Science and Engineering* that ceramic microspheres typically possess median particle diameter of 10-30 μm and the maximum particle diameter of 5-60 μm . Thus, given that Tolliver et al. disclose composition as presently claimed, it is clear that such composition inherently possesses low gloss and that the method inherently reduces gloss as presently claimed.

Although there is no teaching in either Tolliver et al. or *Encyclopedia of Polymer Science and Engineering* of reducing gloss without negatively influencing flow of the powder on baking

to form a smooth surface acceptable for automotive use, it is noted that there is nothing in the claims regarding process of baking the powder or process of using the powder in automotive applications. The claims only require composition comprising thermoplastic or thermosetting polymer and specific type and amount of spheroidal particles, which, as described above, is disclosed by Tolliver et al.

While *Encyclopedia of Polymer Science and Engineering* does not teach the use of fillers such as ceramic microspheres in powder coating composition to reduce gloss or amount of microspheres as presently claimed, it is noted that Tolliver et al. already disclose powder coating composition containing specific amount of microspheres. *Encyclopedia of Polymer Science and Engineering* is only used to teach that the microspheres already disclosed by Tolliver et al. do in fact possess the median particle diameter and the maximum particle diameter as presently claimed.

With respect top argument (b), it is noted that Muthiah et al. teach low gloss powder coating composition comprising polymer and ceramic, hollow glass, or resin microspheres and method of reducing gloss by adding the microspheres to the composition. It is calculated that the microspheres are present in amount of 0.08-50%. Thus, Muthiah et al. explicitly discloses both the amount and type of spheroidal particles presently claimed.

While there is no explicit disclosure of the median particle diameter or the maximum particle diameter as claimed, given that Muthiah et al. disclose that the microspheres are used to provide low gloss composition, it is clear that the microspheres must inherently possess median particle diameter and the maximum particle diameter as presently claimed. Evidence to support

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this position is found in *Encyclopedia of Polymer Science and Engineering*, which discloses that ceramic microspheres typically possess particle size of 10-30 μm and maximum particle size of 5-60 μm while hollow glass microspheres possess maximum particle size of 10-200 μm and average particle diameter of greater than 15 μm (pages 789 and 791-792).

While there is no teaching in either Muthiah et al. or *Encyclopedia of Polymer Science and Engineering* that only the use of certain fillers does not negatively influence the flow of powder coating on curing to avoid finish having an orange peel appearance, it is noted that claims 5-7 are drawn to method of reducing gloss, not method of curing. Further, given that Muthiah et al. taken in view of the evidence in *Encyclopedia of Polymer Science and Engineering* discloses powder coating composition and method of reducing gloss of powder coating identical to that presently claimed, it is clear that such powder coating composition would inherently possess good flow upon curing without orange peel appearance.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 703-305-0208. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

CS.

Callie Shosho
September 16, 2002

Vasu Jagannathan
VASU JAGANNATHAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700